



Vel Tech

Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

Vel Tech Technology Incubator organized workshop on 3D Printing & 3D Scanning

Date: 03.02.2017

Event Report

Submitted By

Vel Tech TBI


Prof. Dr. E. Kannan
Registrar

Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

Event Name: Workshop on 3D Printing & 3D Scanning

Date: 03.02.2017

Time: 10.00 AM to 03.45 PM

Venue: Tinkering Lab, NI Lab, Research Park, Vel Tech
Rangarajan Dr.Sagunthala R&D Institute of Science and
Technology, Avadi, Chennai, India

Speaker of the Event:

- Mr. P.Chandrakumar (Manager-Vel Tech TBI),
- Mr. Riyaz Ahmed (Asst.Prof-Vel Tech University)


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Veltech

Dr.RR & Dr.SR University

(Estd. u/s 3 of UGC Act, 1956)

Passionate Doers

Vel Tech Technology Incubator

One day workshop on



Printing & Scanning

on

03.02.2017

Workshop Profile:

To give an overview of

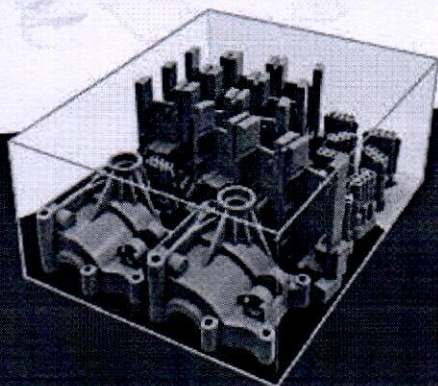
- Various Rapid Prototyping (RP) Technologies
- CAD Modelling
- Reverse Engineering

Course contents:

- Fused Deposition Modeling (FDM) method to 3D Print prototypes
- Overview on several other Additive Manufacturing (AM) techniques
- Overview of various 3D Scanning Methods
- Basics of using a CAD software for AM
- Evaluating a model to prototype
- Slicing and optimizing a design to make it printable
- Evaluating a prototype

Who can participate?

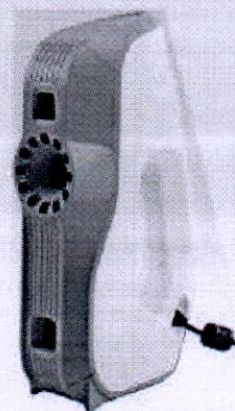
**Students of Engineering / Medical,
Entrepreneurs & Industry Persons**



Facility available in Vel Tech TBI:



3D Printer:
Stratasys Fortus 250mc



3D Scanner:
Artec Eva

Important Dates:-

Last date of Registration : **31.01.2017**

Course Fee : **Rs. 500/-**

Register by sending a DD (Demand Draft) in favour of
"Vel Tech Technology Incubator" payable at Chennai.

Venue:

Veltech Dr.RR & Dr.SR University

400 Feet Outer Ring Road, Avadi, Chennai-600 062, Tamil Nadu, India.

Contact:

P.Chandra Kumar, Manager, Vel Tech TBI, ☎ 96000 40254 | 90425 59778

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**One day workshop on 3D Printing &
3D Scanning on 03.02.2017**

Programme Schedule

Session – 1

S.No	Topic	Duration
1	Overview of 3D Printing Technology and 3D Scanning Technology	09.45 AM to 10.30 AM
2	Revolution of 3D Printing in Education & Research	10.30 AM to 11.30 AM
3	Application of 3D Printing Technologies in Industry revolution	11.30 AM to 12.30 PM

(Lunch @ 12.30PM to 01.30PM)

Session – 2

S.No	Topic	Duration
1	Practical session on FDM method	01.30 PM to 02.00 PM
2	Practical Session on DLP method	02.00 PM to 02.30 PM
3	Practical Session on 3D Scanning	03.00 PM to 03.30 PM

Session – 3

Certificate issue and Feedback

Prof. Dr.  Kannan
Registrar

Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
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Supported by: Vel Tech Technology Incubator

3D Printing Workshop aims to share 3D printing knowledge to students and future engineers by conducting tech-workshops. This workshop on **"3D Printing & 3D scanning"** was organized for students of Aeronautical department. Totally 28 students participated.

Mr. P.Chandrakumar, Manager-Vel Tech TBI, started by addressing the audience and by giving them an insight about Vel Tech TBI and why they were conducting such events for the students, what benefit students will gain by such event and many more advantages for students.

Mr. Riyaz Ahmed explained various types of 3D printers, their working principle, the advantages and disadvantages of various printers and the variety of applications of 3D printers. The expert also demonstrated some 3D printed models. The curiosity among the students was at very high level and they were quite excited to know more about this advanced technology. The students asked many questions and the expert answered them upto their satisfaction level and cleared all the doubts.

OBJECTIVE OF EVENT:

To bring more insights on 3D scanning, it is a fast, efficient process that's used to collect 3D point cloud data to create three dimensional models. Using specialist software, the 3D data is then quickly processed into a triangle mesh or STL file. We can then use this for a range of applications, including comparison to CAD and 3D printing

ABOUT 3D PRINTING:

3D printing is an additive method of manufacturing in which STL or CAD files are printed from a digital format to a physical object by laying down successive layers to build up the object. Items can be printed in a variety of materials and shades. It's also possible to produce working models with moving parts in one go, using the additive manufacturing technique.

ABOUT 3D SCANNING:

3D scanning is a fast, efficient process that's used to collect 3D point cloud data to create three dimensional models. Using specialist software, the 3D data is then quickly processed into a triangle mesh or STL file. We can then use this for a range of applications, including comparison to CAD and 3D printing.

BENEFITS OF 3D PRINTING:

3D printing enables to prototype ideas quickly, bring projects to life and print in a variety of materials and geometries that no other technology can.

BENEFITS OF 3D SCANNING

3D scanning involves using non-contact, accurate measuring systems that are used to provide accurate and reliable data. It interfaces with standard 3D CAD packages for fast, effective, quality inspection and analysis.

3D scanning is a particularly useful tool for reverse engineering, prototyping, model-making, pattern and tool-making and 3D printing (which we'll move on to shortly).

DIFFERENCE BETWEEN 3D PRINTING & 3D SCANNING:

3D scanning and 3D printing are two different techniques within the same rapidly-evolving world where virtually anything is possible (with the right technology and know-how) and the opportunities are endless.

BENEFITS OF SESSION:

It's fast, flexible, highly accurate, can be used by a wide range of applications and capture large amounts of high quality data. Participants get trained in the 3D Printers.

PHOTOGRAPHS:





THANK YOU